

51. A fixator for retaining a graft on an artery comprising:

- a. a plurality of first parts for contacting the graft when the device is pierced radially through the graft and the artery wall,
 - b. at least one second part for contacting the artery when the device is pierced radially through the graft and the artery wall, and
 - c. a resilient member connecting the first and second parts,
- wherein:

- (1) the resilient member biases the first and second parts towards each other into a retaining configuration such that in use the artery and the graft are retained together between the first and second parts of the device, and
- (2) the first and second parts are moveable into an open configuration in which they are further apart than in the retaining configuration to enable the device to be conveyed along an artery.

52. The fixator of claim 51 wherein in the open configuration the first parts, the resilient member, and the second part are all at least substantially disposed along a common axis.

53. The fixator of claim 51 wherein in the retaining configuration at least one of the first and second parts forms an arcuate shape.

54. The fixator of claim 51 wherein at least a portion of at least one of the first and second parts is sharpened to enable said part to pierce a graft and an artery.

55. The fixator of claim 54 wherein both the first and the second parts are so sharpened.

56. The fixator of claim 51 wherein the device is formed from a wire.

57. The fixator of claim 51 wherein the device is formed from a shape memory alloy.

58. The fixator of claim 51 wherein the device has a plurality of second parts.
59. The fixator of claim 58 wherein said plurality of parts are integral or welded together.
60. The fixator of claim 58 wherein the device has equal numbers of first and second parts.
61. The fixator of claim 60 which is formed of a plurality of sets, each set comprising a first part, a resilient member and a second part, wherein the plurality of sets are linked together by a weld, a sheath, a bush, a crimp or by wire.

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The fixator of claim 51 included within a kit, the kit further comprising at least one of:

- a. a device for supporting a catheter within an artery or arterial graft, the device including:
- (1) a locating member for locating the device with respect to the catheter,
 - (2) a plurality of support members for supporting the catheter on the inner wall of the artery or graft,
 - (3) a resilient member connecting the locating member and the support members, wherein the resilient member biases the support members towards the artery wall,
 - (4) means for reducing the distance between the end of each support member distal to the locating member and the end of said support member proximate the locating member, thereby causing the central section of said support member to bow radially outward with respect to the locating member;
- b. a device for dilating an artery when delivered translumenally to a locus of an artery by means of a catheter, the device including:
- (1) a locating member for locating the device with respect to the catheter;
 - (2) a plurality of dilating members,
 - (3) a resilient member connecting the dilating members to the locating member

and biasing the dilating member towards and into contact with the inner artery wall, whereby in use the resilient members cause the dilating members to apply outward pressure to the inner artery wall and dilate the artery,

- (4) means for reducing the distance between the end of each dilating member distal to the locating member and the end of said dilating member proximate the locating member, thereby causing the central section of said dilating member to bow radially outward with respect to the locating member in order to apply increased outward pressure on the inner wall of the artery when the device is in use;

- c. a device for retaining a graft on an artery, the device including an elongate member formed of a resilient material which biases said member into a helical configuration, at least one end of the member being sharpened to enable the member to pierce through the graft and the artery wall, wherein the member is moveable into an open configuration in which it can be conveyed along an artery.

63. The fixator of claim 51 in combination with a graft, wherein the fixator retains the graft on the walls of an artery or vein.

64. A fixator for retaining a graft on an artery comprising one or more elongated members, each elongated member extending between at least one first part and at least one second part, wherein each elongated member is capable of:

- a. an open configuration wherein the first and second parts are distant, and
b. a retaining configuration wherein the first and second parts are closely spaced, and wherein each elongated member is biased towards the retaining configuration,

whereby the elongated members of the fixator may in the open configuration be inserted into the circumference of a graft-bearing artery to pierce the graft and artery, and may then be released to move to the retaining configuration, wherein the graft and artery are maintained between the first and second parts.

65. The fixator of claim 64 wherein the elongated members are at least substantially aligned along a common axis when in the open state.

66. The fixator of claim 64 wherein at least one of the first and second parts is sharpened, whereby it may more easily pierce a graft and an artery.

67. The fixator of claim 64 wherein each elongated member extends entirely between its first and second parts, whereby its first and second parts define its terminal ends.

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A fixator for retaining a graft on an artery, the fixator comprising elongated members:

- a. extending between first and second ends, and
- b. being connected between their first and second ends,

wherein each elongated member moves between:

- (1) an open configuration wherein the elongated member is at least substantially oriented along a linear axis with its first and second ends distantly spaced, and
- (2) a retaining configuration wherein the elongated member is bent so that its first and second ends are closely spaced,

whereby the elongated members of the fixator may in the open configuration be inserted into the circumference of a graft-bearing artery to pierce the graft and artery, and may then be moved to the retaining configuration to situate the graft and artery between the first and second parts.

69. The fixator of claim 68 wherein at least one of the first and second ends of each of the elongated members is sharpened, whereby it may more easily pierce a graft and an artery.

70. The fixator of claim 68 wherein each elongated member is normally biased into the retaining configuration.